

1. A communications module for facilitating wireless electronic communications with an electronic device, the module comprising:

a processor;

a wireless module in electronic communication with the processor for wireless communications with the electronic device;

a paging module in electronic communication with the processor for communicating with a computer through a paging network;

a modem in electronic communication with the processor for communicating with the computer through a communications network; and

memory in electronic communication with the processor for storing data.

2. The communications module as defined in claim 1 wherein the memory is programmed with instructions to cause the processor to communicate with the electronic device using the wireless module.

3. The communications module as defined in claim 1 wherein the memory is programmed with instructions to cause the processor to communicate with the computer using the paging module.

4. The communications module as defined in claim 1 wherein the memory is programmed with instructions to cause the processor to communicate with the computer through the communications network using the modem.

5. The communications module as defined in claim 1 wherein the paging module is a one-way paging module for receiving pages.

6. The communications module as defined in claim 1 wherein the processor is a microcontroller.

7. The communications module as defined in claim 1 programmed to periodically contact the computer.

8. The communications module as defined in claim 1 programmed to periodically contact the computer using the modem.

5 9. The communications module as defined in claim 8 further programmed to maintain an outbound message queue for outbound messages being sent from the electronic device to the computer.

10 10. The communications module as defined in claim 9 further programmed to send the outbound messages to the computer when the computer is periodically contacted.

11. The communications module as defined in claim 1 programmed to be periodically contacted by the electronic device.

15 12. The communications module as defined in claim 1 programmed to be periodically contacted by the electronic device through the wireless module.

13. The communications module as defined in claim 12 further programmed to maintain an outbound message queue for outbound messages received from the electronic device.

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14. The communications module as defined in claim 13 further programmed to store the outbound messages received from the electronic device in the outbound message queue.

25 15. The communications module as defined in claim 14 further programmed to send the outbound messages to the computer when the computer is periodically contacted.

16. The communications module as defined in claim 8 further programmed to maintain an inbound message queue for inbound messages being sent to the electronic device from the computer.

17. The communications module as defined in claim 16 further programmed to receive the inbound messages from the computer when the computer is periodically contacted.

5 18. The communications module as defined in claim 17 further programmed to store the inbound messages from the computer in the inbound message queue.

19. The communications module as defined in claim 18 further programmed to be periodically contacted by the electronic device.

20. The communications module as defined in claim 18 programmed to be periodically contacted by the electronic device through the wireless module.

21. The communications module as defined in claim 19 further programmed to send the inbound messages to the electronic device when the electronic device periodically contacts the communications module.

22. The communications module as defined in claim 18 wherein each inbound message includes a device ID.

20 23. The communications module as defined in claim 22 further programmed to identify the electronic device when the electronic device periodically contacts the communications module and further programmed to search the inbound message queue for appropriate inbound messages for the electronic device and to transmit the appropriate inbound messages to the electronic
25 device.

24. The communications module as defined in claim 1 programmed to contact the computer using the modem in response to a request communication from the computer received through the paging module.

25. A communications module for facilitating electronic communications between a computer and a remote electronic device, wherein the computer is programmed to send pages to the communications module through a paging network and wherein the communications module is programmed to contact the computer through a communications network, the module comprising:

- a processor;
- a wireless module in electronic communication with the processor for wireless communications with the electronic device;
- a paging module in electronic communication with the processor for receiving pager communications from the computer through the paging network;
- a modem in electronic communication with the processor for communicating with the computer through the communications network; and
- memory in electronic communication with the processor for storing data.

26. The communications module as defined in claim 25 wherein the communications module is programmed with wireless instructions to cause the processor to communicate with the electronic device using the wireless module.

27. The communications module as defined in claim 26 wherein the communications module is further programmed with pager instructions to cause the processor to receive the pager communications from the computer using the paging module.

28. The communications module as defined in claim 27 wherein the communications module is further programmed with modem instructions to cause the processor to communicate with the computer through the communications network using the modem.

29. The communications module as defined in claim 28 wherein the paging module is a one-way paging module for receiving pages.

30. The communications module as defined in claim 29 wherein the processor is a microcontroller.

31. The communications module as defined in claim 30 programmed to periodically contact the computer using the modem.

32. The communications module as defined in claim 31 further programmed to maintain an inbound message queue for inbound messages being sent to the electronic device from the computer.

33. The communications module as defined in claim 32 further programmed to receive the inbound messages from the computer when the computer is periodically contacted.

34. The communications module as defined in claim 33 further programmed to store the inbound messages from the computer in the inbound message queue.

35. The communications module as defined in claim 34 programmed to be periodically contacted by the electronic device through the wireless module.

36. The communications module as defined in claim 35 further programmed to send the inbound messages to the electronic device when the electronic device periodically contacts the communications module.

37. The communications module as defined in claim 36 wherein each inbound message includes a device ID.

38. The communications module as defined in claim 37 further programmed to identify the electronic device when the electronic device periodically contacts the communications module and further programmed to search the inbound message queue for appropriate inbound messages

for the electronic device and to transmit the appropriate inbound messages to the electronic device.

39. The communications module as defined in claim 38 further programmed to maintain an
5 outbound message queue for outbound messages received from the electronic device.

40. The communications module as defined in claim 39 further programmed to store the
outbound messages received from the electronic device in the outbound message queue.

41. The communications module as defined in claim 40 further programmed to send the
outbound messages to the computer when the computer is periodically contacted.

42. The communications module as defined in claim 28 programmed to contact the computer
using the modem in response to a request communication from the computer received through
the paging module.

43. A communications module for facilitating electronic communications between a computer and a plurality of remote electronic devices, wherein the computer is programmed to send pages to the communications module through a paging network and wherein the communications module is programmed to contact the computer through a communications network, the module comprising:

- a processor;
- a wireless module in electronic communication with the processor for wireless communications with the plurality of electronic devices;
- a paging module in electronic communication with the processor for receiving pager communications from the computer through the paging network;
- a modem in electronic communication with the processor for communicating with the computer through the communications network; and
- memory in electronic communication with the processor for storing data.

44. The communications module as defined in claim 43 wherein the communications module is programmed with wireless instructions to cause the processor to communicate with the plurality of electronic devices using the wireless module.

45. The communications module as defined in claim 44 wherein the communications module is further programmed with pager instructions to cause the processor to receive the pager communications from the computer using the paging module.

46. The communications module as defined in claim 45 wherein the communications module is further programmed with modem instructions to cause the processor to communicate with the computer through the communications network using the modem.

47. The communications module as defined in claim 46 wherein the paging module is a one-way paging module for receiving pages.

48. The communications module as defined in claim 47 wherein the processor is a microcontroller.

49. The communications module as defined in claim 48 programmed to periodically contact the computer using the modem.

50. The communications module as defined in claim 49 further programmed to maintain an inbound message queue for inbound messages being sent to the plurality of electronic devices from the computer.

51. The communications module as defined in claim 50 further programmed to receive the inbound messages from the computer when the computer is periodically contacted.

52. The communications module as defined in claim 51 further programmed to store the inbound messages from the computer in the inbound message queue.

53. The communications module as defined in claim 52 programmed to be periodically contacted by the plurality of electronic devices through the wireless module.

54. The communications module as defined in claim 53 wherein each inbound message includes a device ID.

55. The communications module as defined in claim 54 further programmed to identify an electronic device when the electronic device periodically contacts the communications module and further programmed to search the inbound message queue for appropriate inbound messages using the device ID for the electronic device and to transmit the appropriate inbound messages to the electronic device.

56. The communications module as defined in claim 55 further programmed to maintain an outbound message queue for outbound messages received from the plurality of electronic devices.

5 57. The communications module as defined in claim 56 further programmed to store the outbound messages received from the plurality of electronic devices in the outbound message queue.

58. The communications module as defined in claim 57 further programmed to send the outbound messages to the computer when the computer is periodically contacted.

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59. A method for facilitating electronic communications between a computer and a remote electronic device, the method comprising:

 sending an inbound message, by the computer, to a communications module, wherein the communications module comprises:

 a processor;

 a wireless module in electronic communication with the processor for wireless communications with the electronic device;

 a paging module in electronic communication with the processor for receiving pager communications from the computer through a paging network;

 a modem in electronic communication with the processor for communicating with the computer through a communications network; and

 memory in electronic communication with the processor for storing data;

 storing the inbound message in an inbound message queue;

 sending the inbound message to the electronic device;

 receiving an outbound message from the electronic device;

 storing the outbound message in an outbound message queue; and

 sending the outbound message to the computer from the communications module.

60. The method as defined in claim 59 further comprising communicating with the electronic device when the electronic device periodically contacts the communications module.

61. The method as defined in claim 59 wherein sending the inbound message to the electronic device is accomplished through use of the wireless module.

62. The method as defined in claim 59 wherein sending the outbound message to the computer from the communications module is accomplished through use of the modem.

63. The method as defined in claim 59 wherein the communications module is programmed to periodically contact the computer using the modem.

64. The method as defined in claim 63 wherein the communications module is further programmed to receive the inbound message from the computer when the computer is periodically contacted.

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65. The method as defined in claim 64 wherein the communications module is further programmed to send the outbound message to the computer when the computer is periodically contacted.

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66. The method as defined in claim 59 wherein the communications module is programmed to be periodically contacted by the electronic device through the wireless module.

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67. The method as defined in claim 66 wherein the communications module is further programmed to send the inbound messages to the electronic device when the electronic device periodically contacts the communications module.

68. The method as defined in claim 59 further comprising identifying the electronic device when the electronic device periodically contacts the communications module.

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69. The method as defined in claim 68 further comprising searching the inbound message queue for appropriate inbound messages for the electronic device and transmitting the appropriate inbound messages to the electronic device.

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